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ABSTRACT

Although sports are a part of the child's everyday experience, little is known about factors that relate to children's participation in sports, to their perceptions of self-competence in sports, and to the impression by others of the competence. Children (N=110) participating in a Pediatric Sports Medicine Project completed the psychological portion of the project by furnishing various cognitive, personality, and interview data. Parents completed questionnaires relating to family and child sports participation, and assessed personality variables in their children. Parents and children individually estimated the child's level of sports competence. Parental views of their sons' sports competence was guided by external factors (team membership) and by maternal involvement in sports. In contrast, the boys' assessments of their own sports competence related entirely to cognitive and personality factors. Age and parent ratings proved to be predictors of team membership for boys' and girls' competence in sports. Boys who were team members tended to be white, less anxious than non-team members, less accident prone, and internally controlled. Girls who were not on teams tended to have defensive parents who stress socially desirable and traditional roles for girls. (Author/NRB)

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COGNITIVE, PERSONALITY AND FAMILY CORRELATES OF CHILDREN'S SPORTS PARTICIPATION AND COMPETENCE

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Physical and sports activity is a part of the child's everyday experience. It is legislated into the school day as well as being a potential organizer of time in the outside environment. Early and enjoyable sports experiences are assumed to help children develop positive attitudes toward fitness and health, to provide lasting patterns of recreational activity, and to foster development of such highly regarded behaviors as cooperativeness, achievement motivation, assertiveness, persistence, ability to delay gratification and reality testing. However, little is known about factors that relate to children's participation in sports on different levels, to their own experience of being competent in sports, and to the impression of their competence by others. All of these factors may relate to whether a child will continue a commitment to physical activity as a lifetime pursuit of physical well-being and pleasurable organizer of leisure time.

While the weight of research in sports participation exists for adolescents and college students, there has been some effort at determining childhood personality characteristics and behaviors that differentiate participants from nonparticipants (Magill & Ash, 1979; Seymour, 1956; Stevenson, 1975). The results have been inconsistent, with the trait of "dominance" characterizing sport participants across most studies (Stevenson, 1975). Magill and Ash (1979)

found that sports competition anxiety was the only behavioral characteristic to discriminate participants from nonparticipants.

This study was designed to assess various physical and psychological factors that would predict competency in sports and levels of sports participation. It is part of a larger pediatric sports medicine project that also evaluated cardiologic and orthopedic correlates of physical activity. Cognitive, personality and family variables were included in an attempt to understand their contribution to the degree to which children are involved in sports and organized team activities, and to determine their relationship to competence as it is perceived by the children themselves and their parents. An effort was made to evaluate the effects of age, sex and race on these criterion measures as well. The goal of this exploratory study was to narrow down the broad range of potential influencing factors related to competency and participation in sports so that eventually a brief screening battery of psychological tests combined with family data could be constructed to assist professionals within a hospital sports medicine clinic in advising parents on questions involving their child's sports participation and readiness.

Method

Subjects

Subjects consisted of 110 children who were recruited from several sources. The sample included children from a local elementary school, children of parents who were hospital employees, as well as children of parents who had heard of the project from other sources (word of mouth, newspaper). This study was part of a larger Pediatric Sports Medicine Project which included cardiologic and orthopedic components as well. Parents were told that the study concerned the correlates (physiological and psychological) of various levels of children's

sports involvement. Thus, the sample consisted of essentially normal children without any significant medical problems. There was a range of sports involvement including those children who engaged in minimal physical activity, to nonorganized sports, to those children who participated on organized athletic teams.

The sample consisted of 72 boys (65.5%) and 38 girls (34.5%) ranging in age from 6.6 to 16.58 ($X = 11.39$, $SD = 2.37$). Racial compositions of the sample consisted of 70.9% Caucasian and 29.1% non-Caucasian (31 children were Black; 1 child was Hispanic).

Procedure

As part of the child's participation in an overall Pediatric Sports Medicine Project, their participation in the psychological portion included two hours of individual time during which various cognitive, personality measures and interview data collected by a predoctoral psychology graduate student who served as a technician for the project. Parents were asked to complete questionaires related to family and child sports involvement and to fill out an instrument designed to measure personality variables in their child (PIC). The children also spent another 3 to 4 hours in the cardiology and orthopedic portions of the project most of which was conducted during the same day.

Parents were given feedback on the results of the psychological tests by means of a brieft written report.

Test Instruments and Questionnaires

Cognitive Measures

Wechsler Intelligence Scale for Children - Revised (Wechsler, 1974). All ten subtests served as predictor variables as did Full Scale IQ, Verbal Scale IQ, Performance Scale IQ, and discrepancy between Verbal and Performance IQ.

Developmental Test of Visual-Motor Integration (Beery, 1967). This is an instrument designed to measure visual-motor functioning in which the child copies a series of designs. The test is scored according to specific criteria based on the child's reproduction of the test stimuli. A visual-motor age equivalent is obtained.

Grades. Parents were asked to indicate on a 5 point scale, their estimate of their child's school grades.

Personality Measures

Piers-Harris Children's Self Concept Scale (Piers & Harris, 1969). This is a self-report instrument designed to measure levels of self-esteem in children. A total score is derived, as are six separate factors: 1) Behavior; 2) Intellectual and School Status; 3) Physical Appearance and Attributes; 4) Anxiety; 5) Popularity; and 6) Happiness and Satisfaction.

Locus of Control Scale for Children (Nowicki & Strickland, 1973). This questionnaire measures the degree to which children view themselves as being able to control aspects of their environment and their own behavior. Low scores are reflective of an internal locus of control while higher scores being reflective of a sense of control by forces outside the self.

Sports Competition Anxiety Test (SCAT) (Martens, 1977). This self-report instrument measures the child's degree of anxiety toward competition experienced in sports activities.

Personality Inventory for Children (Wirt, Lachar, Klinedinst & Seat, 1977).

This is an instrument designed to measure several personality variables in children. It is filled out by parents. The factors evaluated in this study include validity scales: Lie, F, Defensiveness, and child variables: Adjustment, Achievement, Intellectual Screening, Development, Somatic Concern,

Depression, Family Relations, Delinquency, Withdrawal, Anxiety, Psychosis, Hyperactivity, Family and Social Skills and Supplemental Scale of Sex Role.

Demographic and Sports Activity Variables

Data analysis included evaluation of the influence of age, sex, race and parents' level of education on the criterion measures. In terms of sports involvement, measures included parental report of number of hours father and mother (separately) spent in sport activity weekly, number of hours of child's sports participation, number of sports in which child participates and the presence or absence of organized team membership. Parents were also asked to estimate their child's level of peer relationships and level of accident proneness on a 5 point rating scale.

To assess perception of sports competency, parents and children were asked, individually, to estimate the child's level of sports competence on a 5 point rating scale. Reliability checks were done on the following variables: parents' rating of child's sports competence, child's rating of own sports competence, and number of hours per week child engages in sports activities (reported by parents). Letters were sent out to 80 participants in the study between one and six months after their participation asking them to respond to these items for a second time. The rate of response to the reliability check was 65%.

Results

Reliability coefficients were calculated for the parent's rating of the child's sports competence (Parent Rating), the child's rating of his or her own sports competence (Child Rating), and the hours the child spent in sports activity per week (Child's Hours). These values are as follows: Parent Rating, $r = .72$; Child Rating, $r = .61$; and Child's Hours, $r = .37$. It is clear that Child's Hours is not a stable measure; therefore, it was decided to exclude this measure of sports participation from further analysis. This report, therefore,

involves only the analysis of Parent Rating, Child Rating, and Team Membership. Analyses of other psychological and physical variables, as well as the relationships between them, are currently being carried out.

Parent Rating - Boys

Because prior analyses had demonstrated an interaction between sex and some of the predictor variables, a separate analysis of Patient Rating was carried out for boys and girls. Only data for the boys is presented here. The girls' results will be reported elsewhere. The significant zero-order correlations between Parent Rating and the predictor variables are given in Table 1 where it is noted that of the 55 variables evaluated against Parent Rating, six significant correlations emerged.

Insert Table 1 here

The next step in the analysis was the use of these significant relationships in a series of regression analyses, the goal of which was to create an optimal equation for predicting Parent Rating. This analysis involved a combination of hierarchical and stepwise regression procedure (Nie, et al., 1975). Of the six variables orginally found correlated with Parent Rating, three survived in the final equation. Table 2 provides the results of this analysis.

Insert Table 2 here

Examination of the results of the regression analysis reveals that it has been possible to account for about a quarter of the variance in Parent Rating. The conservative estimate of variance accounted for, taking into consideration standard errors and sample size, yields a figure of 20% of the variance accounted for. The equation as a whole is significantly beyond $p = .03$. Examination of the residuals and use of the Durbin-Watson statistic led to the retention of the null hypothesis of uncorrelated error. This was true for all subsequent regression analyses as well.

Race, with nothing partialed out, accounts for approximately 6% of the variance in Parent Rating. It should be noted that in this sample, 71% of the boys were white. The addition of team membership to the equation adds 11% more variance for in Parent Rating over and above that contributed by race alone. Finally, the addition of Mothers Hours contributes another 6% to the variance in Parent Rating over and above that accounted for by Race and Team Membership. Thus, white children tend to be rated higher in sports competence by their parents than do non-white children, team members are rated more competent than non-team members, and the more hours per week the mother engages in sports, the higher the parents will rate their sons' competence.

Child Rating - Boys

A separate analysis of childrens' ratings of their own sports competence was performed using only the boys in the sample. Of the total of 72 boys, Child Ratings were available on 71 of them. The significant zero-order correlations are given in Table 3.

Insert Table 3 here

The next step entailed separate stepwise analyses of the Child Ratings against these significant WISC-R, Piers-Harris, and PIC variables. For the WISC-R data, it was decided not to use the composite scores of the Full Scale, Verbal and Performance IQs. This was done because it was felt that it was preferable to examine, directly, the WISC-R scaled scores rather than average scores wherever possible. Also, it is clear that the IQs tended to have lower correlations with Child Rating than the individual subtest scores. When the stepwise analysis was carried out on the significant WISC-R subtest variables, only the Vocabulary subtest yielded a significant amount of variance to Child Rating. Therefore, only Vocabulary was retained in the analysis.

The same procedure was followed with the three significant Piers-Harris factors. The one contributing significant unique variance is Factor 3 (Physical Appearance and Attributes). Of the six PIC variables, only two, the F Scale and the Hyperactivity Scale, survived the selection process.

The four variables surviving the procedure were themselves combined and a stepwise regression analysis performed. Of the four, only one, the PIC F Scale, dropped out of the analysis, the rest being retained. The results of the analysis are provided in Table 4.

Insert Table 4 here

Almost 40% of the variance in the boys' ratings of their own sports competence has been accounted for by the three variables taken together. The conservative adjusted estimate yields a figure of better than one third of the variance accounted for. Vocabulary on the WISC-R, with nothing partialed,

accounts for 21% of the variance in the boys' ratings of their own competence. This is an inverse relationship; boys with higher Vocabulary scores tend to see themselves as less competent in sports. Holding Vocabulary constant, the addition of the PIC Hyperactivity scale adds an additional 11% of the variance accounted for. Finally, the introduction of the Piers-Harris Factor 3 (Physical Appearance and Attributes) in the equation yields an increment of 7% in the variance accounted for over and above Vocabulary and Hyperactivity. Thus emerges a picture of the child with positive impression of his sports competence as having a relatively lower vocabulary ability, higher in hyperactivity, and more positive in his impressions of his physical appearance and attributes than the child with a lesser impression of his sports ability.

Team Membership - Boys

In this sample, 72 children (65.4%) belonged to organized teams while 38 (34.5%) did not. For the males, the breakdown of team membership was 52 (72.2%) team members and 20 (28.8%) nonmembers. For the girls, 20 (52.6%) were team members and 18 (47.4%) were not team members. Several different sets of analyses were performed in an attempt to elucidate the variables accounting for team membership.

Because sex was a significant discriminator for team membership (r = .22, p = .02) and because examination of the correlation matrices for team membership for boys vs. team membership for girls yielded rather different lists of significant variables, it was decided to undertake separate analyses for boys and girls.

Point biserial and tetrachoric correlations were computed for the variable of team membership and the data set. The significant correlations are given in Table 5.

Insert Table 5 here

Next, a discriminant analysis was performed for the factor of team membership employing the significant variables. A stepwise method was chosen for this analysis. The inclusion rule for the stepwise procedure was that Wilk's Lambda should be minimized and the multivariate F ratio be maximized (these two functions are inversely related). A complete explication of this stepwise procedure is contained in the SPSS Manual (Nie, 1975).

The seven significant variables were entered into the equation. Because the N's for the groups were unequal, a Bayesian posterior probability adjustment was included. All seven of the variables initially entered survived this selection procedure. Table 6 provides summary data for this analysis.

Insert Table 6 here

A good idea of the contribution of the various variables to team membership can be gotten from examining the group means for team and non-team members, shown in Table 7.

Insert Table 7 here

It can be seen that the function generated by the stepwise procedure indicates that team members tend to be white more often than nonwhite, to be older than non-team members, and were rated as more competent in sports by their parents than non-team members. Team members were also less accident prone than their non-team counterparts, and are more internally oriented in locus of control than non-team members. Team members tended to have fewer somatic concerns and to be less anxious than the non-team members.

The next question concerning this analysis is how successful it is in classifying the two groups. The Eigenvalue indicates that 44% of the variance in this set of seven variables is contained by the discriminant function. The squared canonical correlation indicates further that approximately 30% of the variance in the variables is accounted for by team or non-team membership. The value of Wilk's Lambda is significant and indicative of moderately good separation of the groups. Finally, using the classification functions derived from the discriminant function, it is clear that it is possible to arrive at a classification into groups which is above that expected by chance. The classification results are given in Table 8. The percent of cases correctly classified is 80%.

Insert Table 8 here

Team Membership - Girls

A discriminant analysis was performed on the team membership data for girls exactly as it was for boys. The zero order correlations which were significant for girls are shown in Table 9. As can be seen, only four of the variables

relate to team membership for the girls (as opposed to seven for the boys). Boys and girls share three in common (age, locus of control, and Parent Rating).

Insert Table 9 here

The stepwise discriminant analysis was performed, using the four significant variables, according the criteria described above for the boys' analysis. Because of missing data, four cases were dropped from the team membership group, leaving 16 team cases and 18 non-team. Bayesian posterior weighting was employed. The group means for the four variables are given in Table 10.

Insert Table 10 here

Using Wilk's Lambda as the stepwise inclusion criterion, three of the four initially significant variables were included: Age, PIC Lie, and Parent Rating. Locus of Control did not result in a significant increment in discriminative power when other variables were in the equation. The summary of the discriminant analysis is given in Table 11.

Insert Table 11 here

Here it is seen that the discriminative function captures 71% of the variance existing in the three discriminating variables. The squared canonical correlation indicated that group membership is itself responsible for 41% of the variance in the three variables. The Wilk's Lambda again indicates rather good discrimination and it is clear that it is unlikely due to chance fluctuation in the variables.

The efficiency of the classification derived from this discriminant analysis is illustrated in Table 12. The percent of cases correctly classified is 73.53%. This is rather better than would be expected on the basis of chance alone.

Insert Table 12 here

Discussion

The data regarding perceived sports competence among the boys reveals a varied picture depending on whether the parents or the boys themselves are judging their competence. When viewed by the parents, cognitive and personality factors play no role; only objective and demographic variables are predictive of the parent's impression of the child's sports competence. Thus, boys are more likely to be seen by their parents as competent in sports if they are white, are members of teams, and if the mother herself is actively involved in sports. Apart from the influence of race, which may reflect cultural differences in the generalized expectancy of their boys' competencies, the parents appear to judge their boys' sports competence on the basis of external evidence of competence (team membership), and the value they themselves place on sports involvement.

It is unclear from these data why only the mothers' involvement in sports related to the parents' rating of the boys' competence, and not the degree of sports participation of the fathers. Indeed, there was a negative relationship between Father's Hours and Parent Rating which did not survive the regression analysis. The previous literature is not helpful because several conflicting patterns of findings emerge. Magill and Ash (1979) found no relationship between sports participation of children and their parents. They did not assess impressions of sports competence. Kay, Felker and Varoz (1972) found the interest of both the mothers and fathers to be related to the child's interest (not competence) in some groups of children. In their study, the children themselves reported on their parents' interests. Similarly, Snyder and Spreitzer (1976) report that both parents are influential, but their subjects were adolescents who reported on their parents' interests and encouragements; and Greendorfer and Lewko (1978) found the fathers to be more influential than the mothers in their children's sports socialization. It is proposed here that fathers' sports involvement did not have a positive relationship, and in fact tended to have a negative relationship, with boys' sports competence as judged by the parents, because the fathers' sports involvement may have set a high standard in the family, against which the sons were judged less competent. Although this effect was not strong enough to survive the final, multiple regression analysis, it was sufficient to suppress the positive modeling and encouragement by fathers so frequently mentioned in the literature.

In contrast to the parents' impressions, the boys' assessments of their own competencies in sports relates entirely to cognitive and personality factors. Boys who view themselves as competent in sports have relatively lower intelligence, particularly vocabulary ability, are more active (perhaps tending towards hyperactive), and have positive impressions of their physical

attributes and abilities. This pattern is suggestive of a compensatory process in which the boys emphasize their particular strengths, whether cognitive or athletic, and move away from their areas of weakness. This is similar to Morgan's gravitational hypothesis (Morgan, 1972) which suggests that persons with certain personality configurations gravitate towards activities in sports which are most satisfying to them, and is consistent with current theories of learning and reinforcement.

As noted previously, it was not possible to analyze the variables relating to amount of sports involvement because of problems in reliability of the measure. While not a direct measure of degree of sports activity, team membership is related, and is, of course, interesting and important in its own right. For both boys and girls, in common, only two variables discriminate between children who play on teams from those who do not: age and the parents ratings of the children's sports competence. Children on teams tend to be older and to be viewed by their parents as more competent in sports. Neither finding is surprising. As children mature, there are objectively, more opportunities for team involvement. Furthermore, it has been noted above that in judging their children's competence, parents seem to use external data, such as team playing, to guide them.

In addition to age and parent rating, the other factors related to team membership for boys, but not girls, are race, accident proneness, locus of control, somatic concern and anxiety. Specifically, boys who play on teams tend to be white, to be judged by their mothers to be not accident prone, to have an internal locus of control, and to have relatively little somatic concern and anxiety. The race variable most probably reflects differences in opportunity to play on teams. Most of the white children in the sample were suburban while most of the black children were from inner city areas. The remaining variables

appear to portray the team boys as active, competent, emotionally calm, perhaps graceful children who have few concerns about their physical well-being and who feel they are effective manipulators of their environments. The boys who are not on teams tend to be clumsy, fearful, concerned about their bodies, less likely to take risks, and to feel they are not able to have a significant effect on their environment.

For the girls, the inverse relationship of the PIC Lie Scale score to team membership suggests that parents who are defensive and ascribe undue virtue to their children, have daughters who are not likely to play on teams. For such parents, socially desirable behavior and traditional roles for girls may be stressed in child rearing, making it difficult for their daughters to engage in such a "masculine" activity as team sports.

It must be noted that, although many of the findings reported here are highly significant, they should be considered only suggestive. Sampling problems resulted in a preponderance of white suburban boys in the study, and in more families with strong interests in sports than might be found in the population at large. These findings are in need of cross-validation.

Summary

Early and enjoyable sports experiences are assumed to help children develop positive attitudes towards physical fitness and health. In order to investigate the cognitive, personality and family factors which relate to the degree and competence of sports participation, as well as whether children play on organized teams, 110 children and their families were evaluated on a variety of psychological tests and interviews. Only psychological data relating to perceived sports competence of boys, and team membership of boys and girls are presented here.

The findings indicate that the parents' views of the sports competence of their sons is guided by external factors, such as race and the team membership of the boys, and by the mothers' own interest and involvement in sports. In contrast, the boys' view of their own sports competence is related to the cognitive and personality factors of vocabulary ability, level of activity, and self-concept in regard to physical appearance and attributes. Common predictors of team membership for both boys and girls were age and their parents' ratings of their sports competence. In addition, the boys who were team members tended to be white, less anxious than the non-team members, to have less accident proness and somatic concern, and to be internally controlled. Girls who were not on teams tended to have defensive parents who stress socially desirable and traditional roles for girls.

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Table 1

Significant Correlations Between Parent Rating of Boys' Sports Competence and Predictor Variables

Predictor Variable	Correlation with Parent Rating	p
Race	.25	.032
PIC Psychosis Scale	-.29	.016
Team Membership	.41	.000
Number of Sports	.28	.019
Mother's Hours	.19	.015
Father's Hours	-.23	.055

Table 2

Summary of Regression Analysis of

Parent Rating of Boys' Sports Competence

N = 72

Variable	p	sr^2	R	R^2	B	Beta
Race	.05	.06	.25	.06	.163	.09
Team Membership	.01	.11	.42	.18	.655	.36
Mother's Hours	.05	.06	.49	.24	.071	.25

Parent Rating = .163 (Race) + .655 (Team Membership)

+ .071 (Mother's Hours) + 2.915

$R = .49$

$p = .03$

$R^2 = .24$

Adjusted $R^2 = .20$

Constant = 2.915

Table 3

Significant Correlations Between Children's Ratings of Their Sports Competence and Predictor Variables

Predictor Variable	Correlation with Child Rating	p
WISC-R Full Scale IQ	-.31	.009
Verbal Scale IQ	-.30	.01
Performance Scale IQ	-.24	.048
Information	-.31	.008
Vocabulary	-.45	.000
Block Design	-.31	.008
Piers-Harris Total	.28	.018
Factor 3	.37	.001
Factor 5	.29	.015
Factor 6	.25	.034
PIC F Scale	.31	.008
Achievement Scale	.31	.008
Somatic Concern	.25	.038
Delinquency	.28	.021
Hyperactivity	.33	.005
Aggression	.25	.033

Table 4

Summary of Regression Analysis of Boys' Rating of Their Own Sports Competence

N = 71

Variable	p	sr^2	R	R^2	B	Beta
WISC-R Vocabulary	.001	.21	.46	.21	-.109	-.396
PIC Hyperactivity	.001	.11	.57	.32	.027	.327
Piers-Harris 3	.01	.07	.62	.39	.069	.265

Child's Rating = -.109 (Vocabulary + .027 (PIC Hyperactivity)
+ .069 (Piers-Harris Factor 3) + 3.099

$R = .62$

$p = .001$

$R^2 = .39$

Adjusted $R^2 = .36$

Constant = 3.099

Table 5

Significant Correlations Between Boys' Team Membership and Predictor Variables*

Predictor Variable	Correlation with Team Membership	p
Age	.25	.031
Race	.28	.016
Locus of Control	-.31	.008
PIC Somatic Concern	-.28	.019
PIC Anxiety	-.24	.04
Parent Rating	.41	.000
Accident Proneness	-.30	.01

*On coding of the variables, Team Membership - Yes = 1, No = 0; Race - White = 1, Nonwhite = 0.

Table 6

Summary of Discriminant Analysis

of Boys' Team Membership*

Predictor Variable	Discriminant Function Coefficients Standardized	Unstandardized
Race	.138	.319
Age (Months)	.164	.006
Parent Rating	.577	.774
Accident Proneness	-.313	-.468
Locus of Control	-.346	-.073
PIC Somatic Concern	-.267	-.024
PIC Anxiety	-.091	-.009
		Constant -.183

Group Centroids (Means) Team Member = 0.398. Non-Team Member = -.1069

Wilk's Lambda = .69

Chi Square = 23.46, df = 7, p = .001

Canonical Correlation = .55

Canonical Correlation Squared = .30

Eigenvalue = .44

*On coding of the variables, Team Membership = 1, non-Team Member = 0; White = 1, Nonwhite = 0.

Table 7

Boys' Group Means for Team and Non-Team Members

Variable	Team Member Means	Non-Team Member Means
Race*	.804	.526
Age (Months)	143.00	127.05
Parent Rating	3.88	3.16
Accident Proness	2.14	2.63
Locus of Control	11.53	15.04
PIC Somatic Concern	50.31	57.89
PIC Anxiety	50.63	56.58

*The mean for the Race variable is simply the proportion of children of either race in either group. As can be seen, approximately 53% of the non-team group was white, 80% of the team group was white.

Table 8

Classification of Boys' Team Membership

Derived From Disriminant Function Analysis

		Predicted Group Membership	
Actual Group	N	Team Member	Non-Member
Team Member	51	48 (94.1%)	3 (5.9%)
Non-Member	19	11 (57.9%)	8 (42.1%)

Table 9

Significant Correlations Between Girls' Team Membership and Predictor Variables

Predictor Variable	Correlation with Team Membership	p
Age	.44	.006
Locus of Control	-.32	.048
PIC Lie	-.38	.026
Parent Rating	.33	.04

Table 10

Girls' Group Means for Team and Non-Team Members

Variable	Team Member Means	Non-Team Member Means
Age (Months)	143.56	117.88
Locus of Control	11.00	14.66
PIC Lie	45.18	52.55
Parent Rating	3.44	3.05

Table 11

Summary of Discriminant Analysis of Girls' Team Membership

Predictor Variable	Discriminant Function Coefficients Standardized	Unstandardized
Age	.765	.032
PIC Lie	-.566	-.073
Parent Rating	.486	.713
		Constant -2.964

Group Centroids (Means) Team Members = 0.869, Non-Team Members = -0.772

Wilk's Lambda = .58

Chi Square = 16.421, df = 3, p = .001

Eigenvalue = .71

Canonical Correlation = .64

Canonical Correlation Squared = .41